STAT
Approved For Release 2005/06/23 : CIA-RDP78B05171A000400030006-4

	SHEET 1 OF
TITLE	USED ON MLT-1540
ACCEPTANCE TEST PROCEDURE FOR LIGHT TABLE MLT-1540	DATE 30 October 1970
	REVISION (See last sheet for record)

STAT

SERIAL NUMBER _____

TEST BY - _____

DATE 31 October 1970

TIME _____

Declass review by NGA/DoD

This item has successfully performed to all of the requirements as itemized and checked in the body of this procedure.

_____
Date Signature

PREPARED BY	DATE	APPROVED BY	DATE

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1.0 PURPOSE

The purpose of the Acceptance Test Procedure is to verify that the Modular Light Table, MLT-1540, meets its functional and performance requirements.

2.0 EQUIPMENT REQUIRED

STAT 2.1 MLT-1540 complete per [ ] Drawing No.

2.2 Test film as follows:

9.5 inch wide, 4 mil base, 1,000 foot roll

6.6 inch film, 1,000 foot, 2 rolls

5 inch film, 1,000 foot, 2 rolls

70mm film, 1,000 foot, 2 rolls

2.3 Empty take-up spools
(This should be commensurate with the number of films required as listed above.)

2.4 Vibration target

2.5 Stop watch

2.6 GFE foot lambert meter (Weston Model 759)

3.0 ACCEPTANCE TEST

Completion and verification of each of the following items shall be noted by the inspector's stamp or initials in the space provided.

3.1 Mechanical and visual inspection

STAT The MLT shall be carefully examined to determine conformance to the requirements of [ ] Drawing ; Outline Drawing. Moving parts such as covers, latches and gear mechanisms shall be checked to assure proper fit and operation without sticking or binding. Quality of workmanship, proper materials and finishes, nameplate installation, etc. shall be verified.

Film Tension
5" Reel 4-5 lbs - 1# per inch

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SHEET NO. 3

3.2 Mark off table surfaces with china markers to show restricted area using the plastic template provided. OK

3.3 Connect table to regulated 117 VAC, 25 amp power source.

3.4 Turn lights on to max intensity, both sides.

a) Record time turned on. 5:00 P.M

3.5 Operate the elevating mechanism.

a) Note max and min distance from floor. (Max = 40" Min = 22") < MECH STOPS UPPER & LOWER O.K

3.6 Check operation of manual hand elevation for smoothness of operation. OK

3.7 Check film rollers for smoothness of operation and surface. OK

3.8 Check that the coating on bottom cover is in place and smoothly applied. OK

3.9 Check that wheel locks operate properly, both for rotation and rolling. OK

3.10 Mount two 1,000 ft (500 ft) rolls of 70mm film on table, dual web configuration, emulsion up.

a) Note time to rewind completely, both rolls at same time, in opposite direction. (≤ 3 minutes) OK

b) Note tracking characteristics. WILL NOT TRACK * NO

c) Note effect on stationary web when other moves and stops rapidly. Check both webs. (No interreaction)

d) Measure min speed on front roll only. (Smooth control from 0 to 1 inch/min.) OK

3.11 Mount two 1,000 ft (500) rools of 70mm film on table, dual web configuration, emulsion down.

a) Note time to rewind completely, both rools at same time, in opposite direction. (≤ 3 minutes) OK

b) Note tracking characteristics. * NO

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c) Note effect of stationary roll when other moves and stops rapidly. Check both webs. (No interreaction) ILLEGIB

3.13 Mount two rolls 5" film (~~1,000 ft~~) on table, split vertical mode, emulsion up and emulsion down. 1 min 1 sec. OK

a) Operate to insure split vertical capability.

3.14 Mount 1,000 ft roll 9 1/2" film, emulsion up.

TENSION a) Note time to completely rewind. (≤ 3 min.) * 3½ MIN - With Help

b) Operate take-up mechanism. Note max capability. (≥ 76 inches) OK

c) Scan slowly with loop take up. Note tracking problems. OK

d) Start and stop rapidly from full speed (no loop). (No slack loops or excessive tension) OK

3.15 Operate tilt mechanism.

a) Note that full tilt provides $15^{\circ} \pm 1^{\circ}$ slope. OK

b) Note that horizontal table is level $\pm 1^{\circ}$. OK

3.16 Operate carriage motion system with table horizontal, and weight of optics on carriage.

Set friction locks.

a) Note force required to move carriage with locks set. (≥ 10 lbs)

Release friction locks.

b) Check operation of adjustable stops, "x" direction.

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c) Check that "Y" motion cover full depth of the formats. _____

d) Note max speed, x direction. (≥ .5 in/sec) _____

e) Note min speed, x direction. (FULL STOP) _____

f) Note max speed, y direction (≥ .5 in/sec) 0.59

g) Note min speed, y direction. (FULL STOP) 2 in 32 sec.

[redacted] ILLEGIB

i) Note force required to move carriage with motors disengaged x and y direction. (4 lbs both axis) 3-4 in "Y" NEAR BOTTOM

3.17 Operate carriage motion system with table tilted, and weight of optics on carriage.

a) Note max speed, x direction. (≥ .5 in/sec) _____

b) Note min speed, x direction. (FULL STOP) _____

c) Note max speed, y direction. (≥ .5 in/sec) _____

d) Note min speed, y direction. (FULL STOP) _____

[redacted] ILLEGIB

f) Check operation of "fail-safe" system for Y-direction movement. _____

3.18 Mount dial indicator on optics holder with weight of optics attached.

a) Note smoothness of operation from action of indicator. as the microscope is raised and lowered throughout its range. _____

3.19 Check parallelism of optics carriage to format surfaces with dial indicator.

a) Note maximum deviation. (Within .015 inches) _____

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3.20 Check collimation of pod to both format surfaces. This must be done with weight of Zoom 240R with 28 Rhomboids on carriage.

a) Note collimation deviation, if any. (10 minutes max x & y) _____

3.21 Check illumination on left format surface.

a) Note time. Check that 30 minutes minimum have elapsed since 3.4 a). _____

b) Note max illumination at format center. (≥ 3,000 ft lamberts) Left Center _____

3450
Max illumination

Set right format to minimum.

c) Note deviation from previous max. (100 ft Lamberts) → 150 Ft. Lambert _____

Return right format to maximum.

Set illumination at left center to 3,000 fl. 3025

d) Note minimum illumination over entire surface. _____

2100
Entire surface

e) Note minimum illumination in restricted area. _____

2200
Restricted Area

Set illumination at minimum.

f) Note reading at format center. (≤ 200 ft LAMBERTS) _____

100
MIN ILLUMINATION

Set right illumination at minimum.

g) Note deviation from previous minimum. (≤ 100 ft Lamberts) _____

NO CHANGE
Deviation

Return illumination, both sides, to max.

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3.22 Check illumination on right format surface.

a) Note time. Check that 30 minutes minimum have elapsed since 3.4 a).

b) Note maximum illumination at format center. (≥ 3,000 ft lamberts) 3100

3350
Max illumination

Set left format to minimum.

c) Note deviation from previous maximum. (≤ 100 ft lamberts)

+170
Deviation

Return left to max.

Set illumination at center of format to 3,000 fl.

d) Note minimum illumination over entire surface.

2200
Entire surface

e) Note minimum illumination in restricted area.

2300
Restricted area

Set illumination at minimum.

f) Note reading at format center. (≤ 200 FT LAMBERTS)

110
MIN ILLUMINATION

Set left illumination at minimum.

g) Note deviation from previous minimum. (≤ 100 ft lamberts)

NO CHANGE
Deviation

3.23 a) Note difference between 3.21 b) and 3.22 b). (≤ 100 ft lamberts)

100 Ft.

3.24 Observe light sources for evidence of flicker.

a) Set both at max. Report flicker, if any.

NONE

b) Set both at minimum. Report flicker, if any.

LEFT – ONE LAMP FLICKERS
RIGHT – OK

3.25 Operate film masking system. Insure that lights extinguish in proper order.

OK

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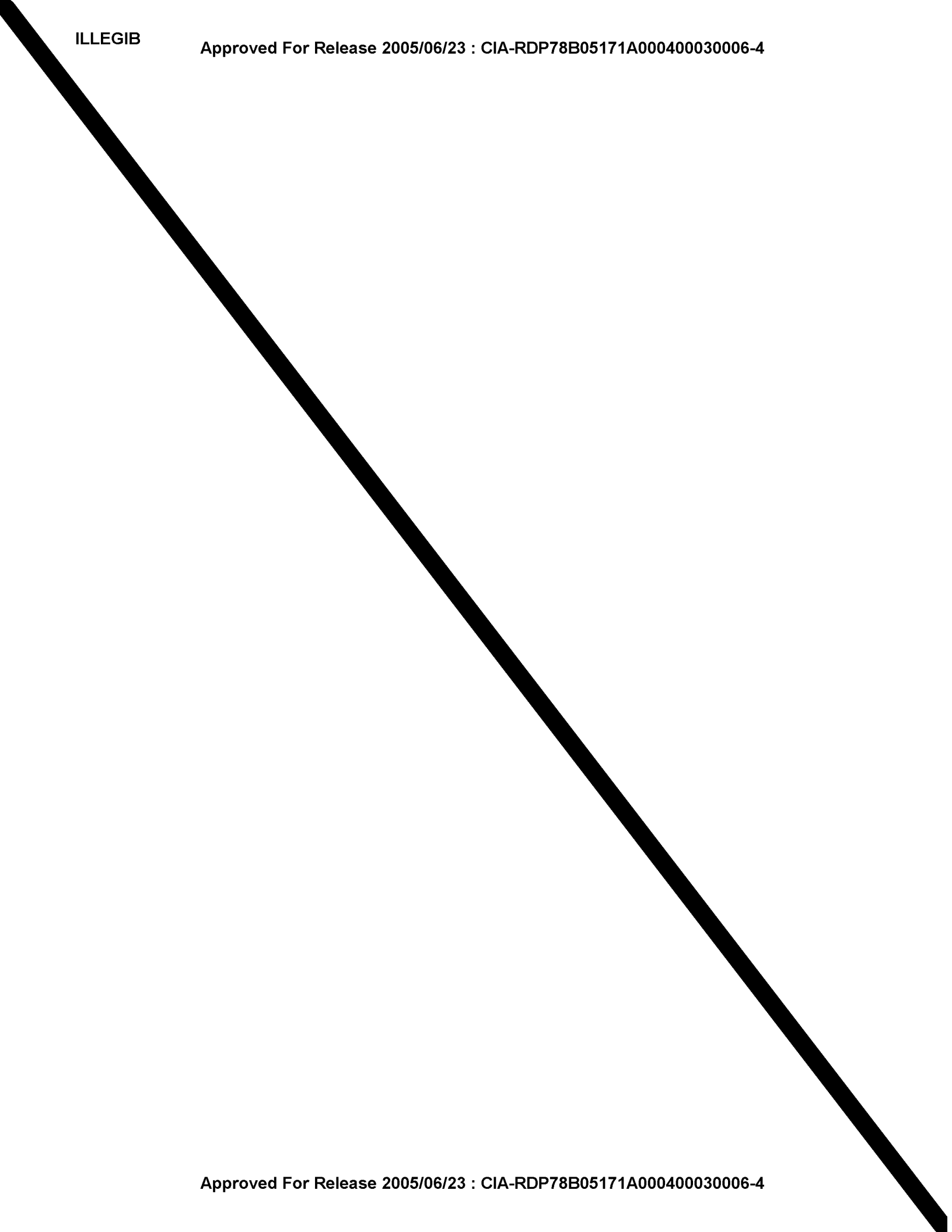

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